

Message Text

UNCLASSIFIED

PAGE 01 STATE 059870
ORIGIN NRC-07

INFO OCT-01 EA-12 ISO-00 OES-07 ACDA-12 DOE-11 SOE-02
/052 R

DRAFTED BY USNRC:JDLAFLEUR
APPROVED BY OES/NET/IM: D B HOYLE
EA/J: D BROWN
ACDA: R WILLIAMSON
-----023336 082253Z /66
O 082230Z MAR 78
FM SECSTATE WASHDC
TO AMEMBASSY TOKYO IMMEDIATE

UNCLAS STATE 059870

EMBASSY PLS PASS TO DOE REP HENoch

E.O. 11652:N/A

TAGS:TECH, JA

SUBJECT:NRC REQUEST FOR PRIMARY COOLANT AND IODINE SPIKING
MEASUREMENTS

1. SUMMARY. NRC REQUESTS APPOINTMENT FOR J. D. LAFLEUR
WITH STA TO DISCUSS MEASUREMENTS OF CESIUM ACTIVITY IN
PRIMARY COOLANT AND AVAILABLE IODINE SPIKING DATA.
SPECIFIC INFORMATION WHICH NRC DESIRES IS IDENTIFIED BELOW.
END SUMMARY.
2. THE DOCUMENT (BEGIN QUOTE) REPORT OF THE CENTRAL ELEC-
TRIC POWER RESEARCH INSTITUTE, RESEARCH REPORT NO.275015,
RADIOCHEMICAL MANAGEMENT OF REACTOR COOLING SYSTEMS, PART 5,
THE RAPID DETERMINATION OF RADIOACTIVE CESIUM IN PWR PRI-
MARY COOLANT, MARCH 1976, (END QUOTE), INDICATES THAT
MEASUREMENTS OF RADIOACTIVE CESIUM IN REACTOR PRIMARY COOL-
UNCLASSIFIED
- UNCLASSIFIED
- PAGE 02 STATE 059870
- ANT ARE APPARENTLY PERFORMED REGULARLY ON OPERATING NUCLEAR
POWER PLANTS IN JAPAN. --
3. PLANT MEASUREMENTS OF CESIUM IN THE PRIMARY COOLANT
WITH CONCURRENT MEASUREMENTS OF OTHER PARAMETERS ARE OF
GREAT INTEREST TO NRC FOR WORK ON IODINE SPIKING AND FUEL
FAILURE DETECTION. IF SUCH MEASUREMENTS ARE AVAILABLE FROM

JAPANESE PLANTS, PARTICULARLY DURING AN IODINE SPIKE,

NRC IS INTERESTED IN OBTAINING THESE DATA.

4. INFORMATION DESIRED IS TIME DEPENDENT PLANT MEASUREMENTS OF CESIUM IN THE PRIMARY COOLANT WITH CONCURRENT MEASUREMENTS OF THE FOLLOWING: RADIOACTIVE IODINE, RADIOACTIVE XENON, TEMPERATURE, PRESSURE, LETDOWN, POWER LEVEL (OR CHANGES IN POWER LEVEL), AND GROSS ALPHA ACTIVITY.

5. IN ADDITION TO RELATED CESIUM ACTIVITY MEASUREMENTS IN THE PRIMARY COOLANT, NRC IS INTERESTED IN ANY AVAILABLE DATA ON IODINE SPIKING MEASUREMENTS AT JAPANESE FACILITIES. THE FOLLOWING ITEMS SPECIFICALLY ADDRESS AREAS OF INTEREST: (A) FOR EACH IODINE SPIKE FOR WHICH DATA ARE AVAILABLE, INDICATE THE POWER LEVEL, IODINE CONCENTRATION, PRIMARY SYSTEM PRESSURE AND TEMPERATURE, AND CLEAN-UP HISTORY FOR A TIME HISTORY OF FROM A WEEK BEFORE THE SPIKING OCCURRED, THROUGH THE SPIKE, AND UNTIL IODINE CONCENTRATION REACHES EQUILIBRIUM. (B) FOR THE SAME IODINE SPIKES, PROVIDE DATA FROM ANY ISOTOPIC MEASUREMENTS. (C) IF GROSS ACTIVITY MEASUREMENTS WERE PERFORMED, WERE ANY NOBLE GAS SPIKES DETECTED? (D) WHAT WAS THE LEVEL OF GROSS ACTIVITY MEASURED? (E) IF GROSS ALPHA ACTIVITY MEASUREMENTS WERE MADE, WHAT WAS THE LEVEL OF GROSS ALPHA ACTIVITY MEASURED? (F) FOR EACH REACTOR FROM WHICH DATA ARE AVAILABLE, UNCLASSIFIED

UNCLASSIFIED

PAGE 03 STATE 059870

PLEASE IDENTIFY IF IT IS A LOAD-FOLLOW OR BASE LOAD PLANT. (G) HAS THE EQUILIBRIUM IODINE LEVEL INCREASED GRADUALLY FROM THE START OF PLANT OPERATION, OR HAS IT INCREASED RAPIDLY OVER A PERIOD OF A FEW WEEKS TO A FEW MONTHS? (H) WHAT WAS THE EQUILIBRIUM LEVEL BEFORE THE FIRST KNOWN IODINE SPIKE? (I) DOES THE IODINE CONCENTRATION RETURN TO THE SAME EQUILIBRIUM LEVEL FOLLOWING A SPIKE?

6. DOE REP IS REQUESTED TO PASS REQUEST TO HAYAKAWA AT STA ASAP. ALSO, PLEASE MAKE APPOINTMENT FOR J. LAFLEUR TO DISCUSS DETAILS OF THIS REQUEST WITH APPROPRIATE GOVERNMENT OFFICIALS DURING HIS VISIT TO TOKYO.

7. NRC APPRECIATES DOE AND EMBASSY ASSISTANCE WITH THIS LATE REQUEST. VANCE

UNCLASSIFIED

NNN

Message Attributes

Automatic Decaptioning: X
Capture Date: 01 jan 1994
Channel Indicators: n/a
Current Classification: UNCLASSIFIED
Concepts: IODINE
Control Number: n/a
Copy: SINGLE
Draft Date: 08 mar 1978
Decaption Date: 01 jan 1960
Decaption Note:
Disposition Action: n/a
Disposition Approved on Date:
Disposition Case Number: n/a
Disposition Comment:
Disposition Date: 01 jan 1960
Disposition Event:
Disposition History: n/a
Disposition Reason:
Disposition Remarks:
Document Number: 1978STATE059870
Document Source: CORE
Document Unique ID: 00
Drafter: JDLAFLEUR
Enclosure: n/a
Executive Order: N/A
Errors: N/A
Expiration:
Film Number: D780105-0145
Format: TEL
From: STATE
Handling Restrictions: n/a
Image Path:
ISecure: 1
Legacy Key: link1978/newtext/t19780391/aaaacyzz.tel
Line Count: 109
Litigation Code IDs:
Litigation Codes:
Litigation History:
Locator: TEXT ON-LINE, ON MICROFILM
Message ID: 58ec0fcb-c288-dd11-92da-001cc4696bcc
Office: ORIGIN NRC
Original Classification: UNCLASSIFIED
Original Handling Restrictions: n/a
Original Previous Classification: n/a
Original Previous Handling Restrictions: n/a
Page Count: 2
Previous Channel Indicators: n/a
Previous Classification: n/a
Previous Handling Restrictions: n/a
Reference: n/a
Retention: 0
Review Action: RELEASED, APPROVED
Review Content Flags:
Review Date: 29 mar 2005
Review Event:
Review Exemptions: n/a
Review Media Identifier:
Review Release Date: N/A
Review Release Event: n/a
Review Transfer Date:
Review Withdrawn Fields: n/a
SAS ID: 3399113
Secure: OPEN
Status: NATIVE
Subject: NRC REQUEST FOR PRIMARY COOLANT AND IODINE SPIKING MEASUREMENTS
TAGS: TECH, JA
To: TOKYO
Type: TE
vdkgvwkey: odb://SAS/SAS.dbo.SAS_Docs/58ec0fcb-c288-dd11-92da-001cc4696bcc
Review Markings:
Sheryl P. Walter
Declassified/Released
US Department of State
EO Systematic Review
20 Mar 2014
Markings: Sheryl P. Walter Declassified/Released US Department of State EO Systematic Review 20 Mar 2014